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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SCHWARTZ, JORDAN MARC

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/571,617	Applicant(s) MIYAZAKI ET AL.	
	Examiner Jordan M. Schwartz	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 9 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Election/Restrictions***

Applicant's election of Group I, claims 1-8 and 10 in the reply filed on December 27, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

Claims 1 and 3-4 are objected to for the following reason. The use of parentheses within the claims creates a lack of clarity because it is not clear if what is set forth in the parentheses is intended as limitations or not. It is suggested that the parentheses be removed for clarity. For example, in claims 1 and 3-4 it is suggested that "(mm)" be changed to "in mm". Likewise in claim 3 line 6, it is suggested that the claimed "d-line (unit: in degrees)" be changed to "d-line in degrees".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or
- (2) a patent granted on an application for patent by another filed in the United States before

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the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Nanba et al patent number 7,035,023.

Nanba et al reads on these claims by disclosing the limitations therein including the following: an imaging lens (column 1, lines 5-8); for use with a solid-state image sensor (column 34, lines 49-63); comprising in order from an object side, an aperture diaphragm (Figure 35, example 18, Figure 43, example 22, "SP"); a first lens element having a positive power and a convex surface on the image side (Figure 35, example 18, Figure 43, example 22, "L1"); a second lens element having a negative power and meniscus with an object side concave shape (Figure 35, example 18, Figure 43, example 22, "L2"); a third lens element of positive power and meniscus with an object side convex shape (Figure 35, example 18, Figure 43, example 22, "L3"); satisfaction of the first condition of claim 1 (example 18 with $f_d/f_{2d} = 3.3$, example 22 with $f_d/f_{2d} = 2.2$); satisfaction of the second condition of claim 1 (example 18 with $f_d/f_{3d} = 1.4$, example 22 with $f_d/f_{3d} = 1.2$); satisfaction of the third condition of claim 1 (example 18 with the condition = -1.6, example 22 with the condition = -2.1); satisfaction of the fourth condition of claim 1 (example 18 with the condition = -1.6, example 22 with the condition = -1.1); one of the first to third lens elements having aspherical surfaces on both side (examples 18 and 22); the second and third lenses formed of synthetic resin (column 7, line 63); the satisfaction of the conditions of claim 6 (example 22); satisfaction of the condition of claim 7 (examples 18 and 22); and

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an imaging lens system with a solid-state image sensor (Figure 58, column 34, lines 49-63).

Claims 1-2, 6-8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsuo patent number 6,970,306.

Matsuo reads on these claims by disclosing the limitations therein including the following: an imaging lens (abstract); for use with a solid-state image sensor (column 1, lines 11-41); comprising in order from an object side, an aperture diaphragm (Figure 10, example 12); a first lens element having a positive power and a convex surface on the image side (Figure 10, example 12, the most object side lens); a second lens element having a negative power and meniscus with an object side concave shape (Figure 10, example 12, the middle lens); a third lens element of positive power and meniscus with an object side convex shape (Figure 10, example 12, the most image side lens); satisfaction of the first condition of claim 1 (example 12 with $f_d/f_{2d} = 3.1$); satisfaction of the second condition of claim 1 (example 12 with $f_d/f_{3d} = 1.8$); satisfaction of the third condition of claim 1 (example 12 with the condition = -1.42); satisfaction of the fourth condition of claim 1 (example 12 with the condition = -1.14); one of the first to third lens elements having aspherical surfaces on both side (example 12); the second and third lenses formed of synthetic resin (example 12); the satisfaction of the conditions of claim 6 (example 12); satisfaction of the condition of claim 7 (example 12); an imaging lens system with a solid-state image sensor (column 1, lines 11-41); and a low pass filter on the object side of the solid-state image sensor (column 4, lines 3-16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanba.

Nanba discloses as is set forth above, and the embodiment of example 8 discloses the claimed structure (Figure 15, example 8) and further discloses the satisfaction of the first condition of claim 1 (example 8, 1st condition = 3.10; the second condition of claim 1 (example 8, 2nd condition = 1.1); the satisfaction of the fourth condition of claim 1 (example 8, the fourth condition = -1.3); the satisfaction of the first condition of claim 3 (example 8 with the condition = 70.8); and the second condition of claim 3 (example 8 with this condition = 1.5).

The example 8 of Nanba discloses as is set forth above and discloses the third condition of claim 1 = -1.4 (example 8) and therefore just outside of the claimed range of "< -1.4". It has been held that where the claimed ranges and prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, a prima facie case of obviousness exists. Titanium Metals Corporation of America, 227 USPQ 773 (Fed Cir. 1985). Since this difference in overlapping ranges is so minimal, it would have been obvious to a person of ordinary skill in the art at the time the

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invention was made to have the lens system of example 8 of Nanba as within this claimed range since this range closely approximates the suggested range taught by Nanba.

Double Patenting

Claims 1-4, 6-8, and 10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/571,618 (US 2007/0053078 herein referred to as "US'078"). Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons.

US'078 discloses the limitations including the following: the limitations of claim 1 (US'078, claim 1); the limitations of claim 2 (US'078, claim 2); the limitations of claim 3 (US'078, claim 3); the limitations of claim 4 (US'078, claim 4); the limitations of claim 6 (US'078, claim 6); the limitations of claim 7 (US'078, claim 7); the limitations of claim 8 (US'078, claim 8); and the limitations of claim 10 (US'078, claim 9).

With respect to claims 1, 3 and 4, US'618 discloses the first three conditions of claim 1 with overlapping ranges the second condition of claim 3 with an overlapping range and the conditions of claim 4 with overlapping ranges. It has been held that where the claimed ranges overlap or lie inside ranges disclosed by the prior art a prima facie case of obviousness exists. *In re Wertheim*, 541 F. 2d 257, 191 USPQ 90 (CCPA 1976). With respect to claims 1 and 3, US'618 further discloses the fourth condition of claim 1 just outside of the claimed range and the first condition of claim 3 just outside of the claimed range.

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It has been held that where the claimed ranges and prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, a prima facie case of obviousness exists. Titanium Metals Corporation of America, 227 USPQ 773 (Fed Cir. 1985).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or

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patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Allowable Subject Matter

Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (with claim 4 overcoming the claim objection and double patenting rejection set forth above).

The following is a statement of reasons for the indication of allowable subject matter: with respect to the allowable subject matter, none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, with reference to claim 4, none of the prior art either alone or in combination disclose or teach of the claimed imaging lens system satisfying the four conditions of claim 1 and further satisfying the two additional conditions of claim 4. Specifically, with reference to claim 5, none of the prior art either alone or in combination disclose or teach of the claimed imaging lens system satisfying the four conditions of claim 1 and further satisfying the additional condition of claim 5.

Examiner's Comments

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For applicant's information, document Jp-2004-325713 listed as an "X" reference on the International Search Report does not qualify as prior art based upon its date. Document Jp2004-226487, also listed as an "X" reference is the equivalent of Matsuo used herein. With respect to Jp-2004-240063, Jp-2004-4566, and Jp2004-219807, the examiner disagrees that these are each "X" references (as listed on the International Search Report), since none of these references read on (satisfy all four of the claimed conditions in the independent claim) nor make obvious what is claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (571) 272-2337. The examiner can normally be reached on Monday to Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jordan M. Schwartz
Primary Examiner
Art Unit 2873
March 28, 2008

/Jordan M. Schwartz/
Primary Examiner, Art Unit 2873